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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		Complete if Known	
		<b>Application Number</b>	10/789,042
		<b>Filing Date</b>	February 27, 2004
		<b>First Named Inventor</b>	Kie Y. Ahn
		<b>Group Art Unit</b>	2815
		<b>Examiner Name</b>	Matthew Landau
Sheet 1 of 3		Attorney Docket No: 1303.050US2	

<b>US PATENT DOCUMENTS</b>				
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-20010017369A1	08/30/2001	Iwasaki, Shingo, et al.	01/04/2001
	US-20010040430A1	11/15/2001	Ito, Hiroshi, et al.	08/07/1998
	US-20020000593A1	01/03/2002	Nishiyama, A., et al.	06/26/2001
	US-20020019116A1	02/14/2002	Sandhu, G. S, et al.	09/24/2001
	US-20020028541A1	03/07/2002	Lee, Thomas H, et al.	08/13/2001
	US-20020048910A1	04/25/2002	Taylor, J. W, et al.	05/26/2000
	US-20020051859A1	05/02/2002	Iida, Tetsuya, et al.	10/29/2001
	US-20020058578A1	05/16/2002	Shindo, Ayako	11/29/2000
	US-20020076070A1	06/20/2002	Yoshikawa, Takamasa, et al.	12/11/2001
	US-20020083464A1	06/27/2002	Tomsen, M., et al.	12/22/2000
	US-20020113261A1	05/02/2002	Iwasaki, Tomio, et al.	08/30/2001
	US-20020117963A1	08/29/2002	Chuman, Takashi, et al.	12/28/2001
	US-20020125490A1	09/12/2002	Chuman, Takashi, et al.	12/28/2001
	US-20020132374A1	09/19/2002	Basceri, C., et al.	02/02/2001
	US-20020148566A1	10/17/2002	Kitano, T., et al.	04/16/2002
	US-20020172799A1	11/21/2002	Subramanian, Ramesh	05/16/2001
	US-20020177244A1	11/28/2002	Hsu, Sheng Teng, et al.	03/28/2001
	US-20020196405A1	12/26/2002	Colgan, E. G, et al.	06/26/2001
	US-20030004051A1	01/02/2003	Kim, D., et al.	09/05/2001
	US-20030008243A1	01/09/2003	Ahn, Kie Y, et al.	07/09/2001
	US-20030026697A1	02/06/2003	Subramanian, Ramesh, et al.	08/02/2001
	US-20030048745A1	03/13/2003	Yoshikawa, Takamasa, et al.	01/05/2001
	US-20030130127A1	07/10/2003	Hentges, Patrick J., et al.	01/09/2002
	US-20030141560A1	07/31/2003	Sun, Shi-Chung	01/25/2002
	US-20030142569A1	07/31/2003	Forbes, Leonard	01/30/2002
	US-20030176049A1	09/18/2003	Hegde, R. I, et al.	03/15/2002
	US-20060263972A1	11/23/2006	Ahn, K. Y, et al.	07/26/2006
	US-20070018214A1	01/25/2007	Ahn, K Y	07/25/2005
	US-20070048989A1	03/01/2007	Ahn, Kie Y, et al.	08/30/2005
	US-20070049054A1	03/01/2007	Ahn, Kie Y, et al.	08/31/2005
	US-20070087563A1	04/19/2007	Ahn, K. Y, et al.	12/08/2006
	US-20070090441A1	04/26/2007	Ahn, K. Y, et al.	12/01/2006
	US-20080029790A1	02/07/2008	Ahn, K. Y, et al.	08/03/2006
	US-20080032424A1	02/07/2008	Ahn, K. Y, et al.	08/03/2006
	US-20080032465A1	02/07/2008	Ahn, K. Y, et al.	08/03/2006
	US-20080048225A1	02/28/2008	Ahn, K. Y, et al.	08/25/2006
	US-20080217676A1	09/11/2008	AHN, K. Y, et al.	05/20/2008
	US-6,125,062	09/26/2000	Ahn, Kie, et al.	08/26/1998
	US-6,141,260	10/31/2000	Ahn, Kie, et al.	08/27/1998
	US-6,146,976	11/14/2000	Stecher, M., et al.	12/14/1999

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### US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-6,147,443	11/14/2000	Yoshikawa, Takamasa, et al.	05/14/1998
	US-6,184,612	02/06/2001	Negishi, Nobuyasu, et al.	08/07/1998
	US-6,210,999	04/03/2001	Gardner, Mark I., et al.	12/04/1998
	US-6,259,198	07/10/2001	Yanagisawa, Shuuchi, et al.	12/23/1998
	US-6,278,230	08/21/2001	Yoshizawa, Atsushi, et al.	08/07/1998
	US-6,285,123	09/04/2001	Yamada, Takashi, et al.	09/10/1999
	US-6,297,095	10/02/2001	Muralidhar, Ramachandran, et al.	06/16/2000
	US-6,313,518	11/06/2001	Ahn, K., et al.	03/02/2000
	US-6,316,873	11/13/2001	Ito, Hiroshi, et al.	08/07/1998
	US-6,320,091	11/20/2001	Ebbinghaus, Bartley B., et al.	06/22/1999
	US-6,388,376	05/14/2002	Negishi, Nobuyasu, et al.	08/05/1999
	US-6,392,257	05/21/2002	Ramdani, J., et al.	02/10/2000
	US-6,395,650	05/28/2002	Callegari, Alessandro Cesare, et al.	10/23/2000
	US-6,400,070	06/04/2002	Yamada, Takashi, et al.	08/07/1998
	US-6,404,124	06/11/2002	Sakemura, Kazuto, et al.	07/28/1999
	US-6,407,435	06/18/2002	Ma, Yanjun, et al.	02/11/2000
	US-6,417,537	07/09/2002	Yang, S., et al.	01/18/2000
	US-6,423,613	07/23/2002	Geusic, Joseph	11/10/1998
	US-6,452,229	09/17/2002	Krivokapic, Z.	02/21/2002
	US-6,472,803	10/29/2002	Yoshizawa, Atsushi, et al.	08/06/1999
	US-6,489,648	12/03/2002	Iwasaki, Tomio, et al.	08/30/2001
	US-6,492,288	12/10/2002	Shindo, Ayako	11/29/2000
	US-6,514,808	02/04/2003	Samavedam, S. B	11/30/2001
	US-6,540,214	04/01/2003	Barber, J. R	12/28/2001
	US-6,559,014	05/06/2003	Jeon, J.	10/15/2001
	US-6,566,147	05/20/2003	Basceri, Cem, et al.	02/02/2001
	US-6,566,682	05/20/2003	Forbes, Leonard	02/09/2001
	US-6,586,797	07/01/2003	Forbes, Leonard, et al.	08/30/2001
	US-6,602,053	08/05/2003	Subramaniam, Ramesh, et al.	08/02/2001
	US-6,630,713	10/07/2003	Geusic, Joseph	02/25/1999
	US-6,641,887	11/04/2003	Lida, Tetsuya, et al.	10/29/2001
	US-6,700,132	03/02/2004	Chuman, Takashi, et al.	12/28/2001
	US-6,734,480	05/11/2004	Chung, Jeong-hee, et al.	01/15/2002
	US-6,744,063	06/01/2004	Yoshikawa, Takamasa, et al.	01/05/2001
	US-6,746,930	06/08/2004	Yang, S., et al.	06/23/1993
	US-6,787,992	09/07/2004	Chuman, Takashi, et al.	12/28/2001
	US-6,818,067	11/16/2004	Doering, K., et al.	04/15/2002
	US-6,838,404	01/04/2005	Hentges, Patrick J., et al.	01/09/2002
	US-6,963,103	11/08/2005	Forbes, L.	08/30/2001
	US-7,042,043	05/09/2006	Forbes, L., et al.	08/30/2001

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### US PATENT DOCUMENTS

Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Filing Date If Appropriate
	US-7,075,829	07/11/2006	Forbes, L.	08/30/2001
	US-7,087,954	08/08/2006	Forbes, L	08/30/2001
	US-7,192,892	03/20/2007	Ahn, K., et al.	03/04/2003
	US-7,312,494	12/25/2007	Ahn, Kie Y., et al.	08/31/2004
	US-7,326,980	02/05/2008	Ahn, K. Y, et al.	08/31/2004
	US-7,365,027	04/29/2008	Ahn, A. Y, et al.	03/29/2005
	US-7,374,964	05/20/2008	Ahn, K. Y, et al.	02/10/2005
	US-7,388,246	06/17/2008	Ahn, K. Y, et al.	06/29/2006
	US-7,390,756	06/24/2008	Ahn, K. Y, et al.	04/28/2005
	US-7,402,876	07/22/2008	Ahn, K. Y, et al.	08/31/2004
	US-7,405,454	07/29/2008	Ahn, K. Y, et al.	08/26/2005
	US-7,410,668	08/12/2008	Ahn, K. Y	08/31/2004
	US-7,410,910	08/12/2008	Ahn, K. Y, et al.	08/31/2005
	US-7,410,917	08/12/2008	Ahn, K. Y, et al.	08/29/2005
	US-7,411,237	08/12/2008	Ahn, K. Y, et al.	10/20/2006
	US-7,429,515	09/30/2008	Ahn, K. Y, et al.	01/14/2005
	US-7,439,194	10/21/2008	Kie, Y. A, et al.	01/07/2005

### FOREIGN PATENT DOCUMENTS

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### OTHER DOCUMENTS – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>1</sup>
	HO, M.-Y., et al., "Suppressed crystallization of Hf-based gate dielectrics by controlled addition of Al <sub>2</sub> O <sub>3</sub> using atomic layer deposition", <u>Applied Physics Letters</u> , Vol. 81, No. 22, (November 2002), 4218-4220	
	HUANG, C. H., et al., "La <sub>2</sub> O <sub>3</sub> /Si <sub>3</sub> N <sub>4</sub> 0.3/Ge <sub>0.7</sub> p-MOSFETs with high hole mobility and good device characteristics", <u>IEEE Electron Device Letters</u> , 23(12), (December 2002), 710-712	
	JUN, JIN HYUNG, et al., "Effect of Structural Properties on Electrical Properties of Lanthanum Oxide Thin Film as a Gate Dielectric", <u>Japanese Journal of Applied Physics</u> , 42, Part 1, No. 6A, (June 15, 2003), 3519-3522	
	KO, MYOUNG-GYUN, et al., "High density plasma enhanced atomic layer deposition of lanthanum oxide for high-k gate oxide material", <u>207th Meeting of the Electrochemical Society</u> , (May 2005), 1 page	
	NIEMIEN, M., et al., "Surface-Controlled growth of LaAlO <sub>3</sub> thin films by atomic layer epitaxy", <u>Journal of Materials Chemistry</u> , vol. 11, (2001), 2340-2345	

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